A NEGLECTED MEXICAN SPECIES OF ARUNDINARIA

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Numerous species of bamboo indigenous to areas of the Western Hemisphere outside of North America have been placed at one time or another in the genus Arundinaria. Without apparent exception, these pertain to other genera. However, a misplaced Mexican species, represented by a single known collection, Liebmann no. 132, apparently does belong here.

This collection consists of sterile leafy branch complements, each attached to a short section of the adjacent culm internode. A specimen from this collection, preserved at the U.S. National Herbarium, shows characters sufficiently critical in nature to warrant the allocation of this species in the genus Arundinaria.

ARUNDINARIA FLABELLATA (Fourn.) McClure, comb. nov.
Guadua flabellata Fournier, Mexicanas plantas 2: 131. 1881. "Otate Mexicanorum. . . In monte Orizabensi, inter praerupta, 9000'." Type: Liebmann no. 132 (HAN). Fournier (l.c.) inadvertently cited this specimen as "Liebmann 131." Liebmann 131 (L) is actually the type of Guadua aculeata Ruprecht, as verified by Hitchcock, who also examined Fournier's type of Guadua flabellata at Hannover. Hitchcock's notes (US) document the statement here published for the first time.

Fournier's brief diagnosis follows: "Ramis flabellatim divergentibus, foliis linearibus longis angustis cum vaginis glabris." The specimen examined by me (US 205711; Liebmann 132, ex C) shows additional features that are more distinctly diagnostic than those recorded by Fournier. The following statements supplement the original description:

Culm sheaths not deciduous (eroded away by weathering -- only a basal fragment remaining on the specimen). Culm internodes cylindrical, not strongly sulcate but marked by a distinct transverse ridge at the level of (but external to) the locus of insertion

of a branch complement; glabrous and lustrous; fistulous, the lumen filled (at least in part) with firm pith. Mid-culm branch complements pleioclade, the component axes unequal, the primary branch dominant. Leaf sheaths finely elevate-veined, minutely verrucose between the veins, otherwise glabrous dorsally, ciliate on one margin near the apex; the inner ligule well exserted, fragile, apically concave, asymmetrical, in some sheaths densely clothed dorsally with fugaceous antrorse hairs; the outer ligule linear, entire or erose on the margin; auricles and oral setae lacking. Leaf blades linear-lanceolate, attenuate-acuminate-caudate, gradually narrowed basally and decurrent on the slender, somewhat elongate, abaxially puberulent petiole; antrorsely scabrous near the outer edge, but elsewhere glabrous on the adaxial surface, villous throughout on the abaxial surface; the midrib strongly salient and glabrous on the abaxial surface, and flanked on each side by 4-3 secondary veins, these separated by 7-5 tertiary ones; the transverse venation plainly visible on both surfaces of young leaves, less clearly so (especially on the adaxial surface) in older ones.

The classic station for the collection of this bamboo is given as "among precipices at 9000 ft. on Mount Orizaba." This mountain is more popularly known today, and is shown on maps, as Citlaltepetl. The recorded altitude of its highest peak is 18,696 feet (Hammond's Ambassador World Atlas, 1956, p. 95). Anyone who has the opportunity to botanize on its slopes will render a useful service to Agrostology if he can find and collect ample specimens of this inadequately known bamboo. -- I shall be glad to supply directions for the selection of material of critical interest.

Flowering and fruiting material is essential to the completion of a description of the plant. Fuller representation of the vegetative structures is also needed, and sterile plants in good condition should not be by-passed. Most generally neglected are the rhizome (of importance for the confirmation of generic affinities) and the young culm shoot with persistent sheaths in good condition still attached. These latter are useful for the recognition of specific entities.